

Claims

We claim:

1. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of sequences provided in SEQ ID NO: 64-77.
2. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:
 - (a) sequences having at least 75% identity to a sequence recited in SEQ ID NO: 61-77;
 - (b) sequences having at least 90% identity to a sequence recited in SEQ ID NO: 61-77 ; and
 - (c) sequences having at least 95% identity to a sequence recited in SEQ ID NO: 61-77.
3. An isolated polynucleotide encoding a polypeptide according to any one of claims 1 and 2.
4. The isolated polynucleotide of claim 3, wherein the polynucleotide comprises a sequence selected from the group consisting of sequences recited in SEQ ID NO: 8-21.
5. An isolated polynucleotide comprising a sequence selected from the group consisting of:
 - (a) sequences having at least 75% identity to a sequence recited in SEQ ID NO: 8-21;
 - (b) sequences having at least 90% identity to a sequence recited in SEQ ID NO: 8-21;
 - (c) sequences having at 95% identity to a sequence recited in SEQ ID NO: 8-21;
 - (d) complements of a sequence recited in SEQ ID NO: 8-21; and
 - (e) complements of a sequence of (a), (b) or (c).

6. A genetic construct comprising at least one polynucleotide according to any one of claims 3-5.
7. The genetic construct of claim 6, wherein the construct comprises a sequence selected from the group consisting of SEQ ID NO: 56-58 and 82-89.
8. A host cell transformed with a genetic construct according to any one of claims 6 and 7.
9. A fusion protein comprising at least one polypeptide according to any one of claims 1 and 2.
10. The fusion protein of claim 9, wherein the fusion protein comprises a sequence selected from the group consisting of: SEQ ID NO: 79-81, 90-97 and 116.
11. A polynucleotide encoding a fusion protein of claim 9, wherein the polynucleotide comprises a sequence selected from the group consisting of: SEQ ID NO: 56-58, 82-89 and 115.
12. A composition comprising at least one polypeptide according to any one of claims 1 and 2, and at least one component selected from the group consisting of: physiologically acceptable carriers and immunostimulants.
13. A composition comprising at least one polynucleotide according to any one of claims 3-5 and at least one component selected from the group consisting of: physiologically acceptable carriers and immunostimulants.
14. A composition comprising at least one fusion protein according to claim 9 and at least one component selected from the group consisting of: physiologically acceptable carriers and immunostimulants.

15. The composition of claim 14, wherein the composition further comprises a flt3 ligand.
16. A composition comprising at least one genetic construct according to claim 6, and at least one component selected from the group consisting of: physiologically acceptable carriers and immunostimulants.
17. A method for enhancing an immune response in a patient, comprising administering to the patient a composition according to any one of claims 11-16.
18. The method of claim 17, wherein the immune response is a Th1 response.
19. The method of claim 17, wherein the composition activates at least one cell selected from the group consisting of T cells and NK cells.
20. The method of claim 17, wherein the composition stimulates cytokine production.
21. The method of claim 17, wherein the composition induces long-term memory cells.
22. A method for the treatment of a disorder selected from the group consisting of immune disorders, infectious diseases and cancer in a patient, comprising administering to the patient a composition according to any one of claims 11-16.
23. The method of claim 22, wherein the disorder is tuberculosis.